J. ent. Soc. sth. Afr. 1975
Vol. 38, No. 1, pp. 61–63

Two new genera of soft scales from Africa (Homoptera: Coccoidea: Coccidae)

by

G. DE LOTTO

Plant Protection Research Institute, Pretoria

Two new genera, *Avricus* and *Trijuba,* are introduced for the inclusion of a few soft scales from Africa. To the former are assigned six species and a key to their separation is given. The latter is monotypic.

References to the original descriptions of the respective type-species are also given.

AVRICUS gen. nov.

Coccidae with the anal opercula set near the posterior end of the body; in shape they are roughly scutiform and each of them carries one discal or subdiscal seta and two or three small apical ones. Antennae normally 8-segmented. Legs all well developed without ungual denticle and with or without free tibio-tarsal articulation. Stigmatic clefts shallow, each provided with three spines of which the median is always longer than the laterals. Marginal setae ranging from slender to stout; pointed, frayed or strongly branched. Dorsal setae spiniform to conical. Dorsal pores subspherical with a small central opening; they are evenly distributed or arranged in an irregular reticulate pattern. Submarginal pores present or absent. Para-opercular pores, when present, moderately to strongly convex; at times they are arranged in clusters surrounded by a sclerotized area. Ventral clistostomatic ducts crowded on the head and extending along the submarginal area of the thorax and abdomen where they tend to become progressively fewer and set more widely apart from one another. Multilocular pores numerous about the genital opening and set in transverse rows across the midregion of the abdomen and thorax. Quinquelocular pores set in irregular bands between the stigmatic openings and stigmatic clefts. Pregenital segments (viii) to (vi) each with a couple of robust setae. Body broadly elliptical or oval to nearly circular in outline.
Type-species: *Ceroplastodes psychotriae* De Lotto, 1956.

The main significant feature of the genus *Avricus* is the distributive pattern of the ventral clistostomatic ducts which are crowded on the cephalic area between the antennae and extend along the submarginal area of the thorax and abdomen where they tend to be progressively fewer and set more widely apart from one another. In species of the genus *Coccus* Linnaeus, 1958 *(s. str.)*, the ducts are either missing altogether or set across the midregion of the thorax; in *Saissetia* Deplanche, 1859, they form an uninterrupted band all along the submarginal area; and in *Pulvinaria* Targioni Tozzetti, 1866, the ducts are more numerous on the posterior end of the abdomen, gradually thinning out toward the head.

Besides the type, the genus *Avricus* should include five African species originally assigned, and still retained, in the genus *Ctenochiton* Maskell, 1879, none of which actually agree with the diagnosis of its type-species *C. viridis* Maskell, 1879, given by Morrison & Morrison (1922). They are: *Ctenochiton adspersus* De Lotto, 1958; *C. amoenus* De Lotto, 1958; *C. arborescens* Laing, 1929; *C. castaneus* De Lotto, 1958; and *C. pluvialis* Hodgson, 1969.

A full description and diagram of *Ceroplastodes psychotriae* De Lotto, 1956, was published at pp. 310–11 of Vol. 19, No. 2 (1956) of this Journal.

The six species can be separated by using the following provisional key:

1 Marginal setae pointed 2
— Marginal setae frayed or strongly branched 4
2 Dorsal pores arranged in an irregular reticulate pattern; para-opercular pores lacking 3
— Dorsal pores evenly distributed; para-opercular pores present, strongly convex **castaneus**
3 Marginal setae as long as the median stigmatic spine; submarginal pores always present; ventral clistostomatic ducts very numerous .... **pluvialis**
— Marginal setae much shorter than the median stigmatic spines; submarginal pores normally absent; ventral clistostomatic ducts rather few .... **psychotriae**
4 Marginal setae slender; dorsal pores distributed in an irregular reticulate pattern 5
— Marginal setae very robust and strongly branched; dorsal pores evenly distributed .... **arborescens**
5 Dorsal setae small; para- opercular pores set within a sclerotized area .... **amoenus**
— Dorsal setae large, stoutly conical; area besetting the para-opercular pores not sclerotized .... **adspersus**

TRIJUBA gen. nov.

Coccidae with the anal opercula removed from the apex of the abdomen by about one third of the body length; they are acutely pointed and noticeably longer than their combined width; each operculum carries one subapical and two minute apical setae. Antennae 8-segmented. Legs with a tibio-tarsal articulatory sclerosis, but with no free tibio-tarsal articulation; claws without denticle. Stigmatic clefts shallow, each with three spines of which the median is stouter and much longer then the laterals. Marginal setae long, robust, slightly dentate or frayed at the apex; straight or curved. Para-opercular and submarginal pores present. Dorsal setae of two sizes. The smaller ones mostly bi- or trifurcate and scattered without any pattern; the larger ones long, robust, finely pointed and arranged in one median and one submedian bilateral rows extending from the anal opercula to the head. Ventral clistostomatic ducts absent. Multilocular pores present on the mid-region of the abdomen. Quinquelocular pores set in irregular bands between the stigmatic clefts and stigmatic openings. Pregenital segments (viii) to (vi) each provided with a couple of setae. Outline of the body very elongate elliptical.

Type-species: *Saissetia oculata* Brain, 1920

The new genus *Trijuba* is promptly recognizable from all genera of soft scales whose characters are sufficiently known at present, by the occurrence on the dorsum of three longitudinal rows of long, finely pointed setae.

A redescription and diagram of the type-species based on syntypes available from Brain's collection were presented at pp. 305–6 of Vol. 20, No. 2 (1957) of this Journal under the heading of *Coccus oculatus* (Brain).

REFERENCES

BRAIN, C. K. 1920. The Coccidae of South Africa, v. *Bull. ent. Res.* **11:** 1–41.

DE LOTTO, G. 1956. A new *Ceroplastodes* (Hom.: Coccoidea) from Kenya. *J. ent. Soc. sth. Afr.* **19:** 310–312.

——— 1957. On some Ethiopian species of the genus *Coccus* (Homoptera: Coccoidea: Coccidae). *J. ent. Soc. sth. Afr.* **20:** 295–314.

——— 1958. New soft scales (Homoptera: Coccoidea: Coccidae) from Africa. *Proc. R. ent. Soc. Lond.* (B) **27:** 165–172.

HODGSON, C. J. 1969. Notes on Rhodesian Coccidae (Homoptera: Coccoidea), iii. *Arnoldia* (Rhodesia), **4** (4): 1–42.

LAING, F. 1929. Descriptions of new, and some notes on old, species of Coccidae. *Ann. Mag. nat. Hist.* (10) **4:** 465–501.

MORRISON, H. & MORRISON, E. 1922. A redescription of the type species of the genera of Coccidae based on species originally described by Maskell. *Proc. U.S. natn. Mus.* **60** (12): 1–120.

Manuscript received 23 December 1974.